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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,032	05/06/2005	Toshihiko Zenpo	04632.0065	2383

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EXAMINER
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PARVINI, PEGAH

ART UNIT	PAPER NUMBER
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1793

MAIL DATE	DELIVERY MODE
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12/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/534,032	<b>Applicant(s)</b> ZENPO ET AL.	
	<b>Examiner</b> PEGAH PARVINI	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/15/08.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 13-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 4,5 and 9-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/20/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Election/Restrictions***

Applicants' election of Group I, claims 1-12 in the reply filed on October 15, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Objections***

Claims 4, 5, 9, 10, 11 and 12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not depend on any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4, 5, 9, 10, 11 and 12 have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3 and 6-8** are rejected under 35 U.S.C. 102(b) as being anticipated by WO 00/05010 to Stoetzel et al.

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Stoetzel et al., drawn to sand cores and moulds in foundries, disclose the use of numerous binders to bind sand particles wherein the binders may be, for example, solution or dispersion of polyvinyl alcohol, dextrin, and starch (Abstract; pages 1-3).

It is noted that claims 1, 2, 6, and 7 are product-by-process claims; with reference to product-by-process claims, MPEP § 2113 states:

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The limitations directed to the method for producing the claimed composition are not considered to add patentable weight to the examination of the product claims. It is well settled in the art that if the examiner can find a product in the prior art that is the same or so similar as to have been obvious, the burden is shifted to the applicant to demonstrate that the process for producing the composition somehow imparts a patentable distinction to the composition under examination.

**Claims 1-3 and 6-8** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,215,143 to Gentry.

Gentry teaches a non-porous carbon foundry sand combined with a suitable binder to form a mixture which forms a mold; the reference discloses the use of silica sand grains and starches as the binder (Abstract; column 1, lines 20-22 and 43-46; column 2, lines 15-17; column 7, lines 40-53). Gentry discloses that any binder

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ordinarily used to bind silica foundry sands can be used with the non-porous carbon sands of the invention.

It is noted that claims 1, 2, 6, and 7 are product-by-process claims; with reference to product-by-process claims, MPEP § 2113 states:

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The limitations directed to the method for producing the claimed composition are not considered to add patentable weight to the examination of the product claims. It is well settled in the art that if the examiner can find a product in the prior art that is the same or so similar as to have been obvious, the burden is shifted to the applicant to demonstrate that the process for producing the composition somehow imparts a patentable distinction to the composition under examination.

**Claims 1-2 and 6-7** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,169,880 to Yoshida et al.

Yoshida et al. discloses foundry sand mold produced by molding a granular refractory material such as quartz with the use of binder and a hardening component (Abstract; column 1 lines 65-68; column 2, lines 64-68; column 3, lines 18-23; column 4, lines 60-65). It is noted that the binder comprises water-soluble parts.

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It is noted that claims 1, 2, 6, and 7 are product-by-process claims; with reference to product-by-process claims, MPEP § 2113 states:

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The limitations directed to the method for producing the claimed composition are not considered to add patentable weight to the examination of the product claims. It is well settled in the art that if the examiner can find a product in the prior art that is the same or so similar as to have been obvious, the burden is shifted to the applicant to demonstrate that the process for producing the composition somehow imparts a patentable distinction to the composition under examination.

**Claims 1-2 and 6-7** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,495,980 to Morley.

Morley teaches a binder or binder mixture for a foundry mould or core wherein the binder mixture may be intimately mixed with the sand or other refractory material to form a flowable mass that can be poured into the mould (Abstract; column 2, lines 37-45; column 3, lines 24-28 and 41). Furthermore, the reference discloses that in order to improve flowability of the composition, it is beneficial to add paraffin to it (column 10, lines 25-30).

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It is noted that claims 1, 2, 6, and 7 are product-by-process claims; with reference to product-by-process claims, MPEP § 2113 states:

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The limitations directed to the method for producing the claimed composition are not considered to add patentable weight to the examination of the product claims. It is well settled in the art that if the examiner can find a product in the prior art that is the same or so similar as to have been obvious, the burden is shifted to the applicant to demonstrate that the process for producing the composition somehow imparts a patentable distinction to the composition under examination.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PEGAH PARVINI whose telephone number is (571)272-2639. The examiner can normally be reached on Monday to Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. P./  
Examiner, Art Unit 1793

/Michael A Marcheschi/  
Primary Examiner, Art Unit 1793